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INHIBITION OF ANGIOGENESIS BY HIGH MOLECULAR WEIGHT KININGEN DOMAIN 3 PEPTIDE ANALOGS

Abstract of the Disclosure

Peptide analogs the high molecular weight kininogen domain 3 are potent inhibitors of angiogenesis. The peptides have the formula (a) X_1 -Asn-Asn-Ala-Thr-Phe-Tyr-Phe-Lys- X_2 , (b) X_3 -Cys-Val-Gly-Cys- X_4 , (c) X_5 -Leu-Asp- X_7 -Asn-Ala-Glu-Val-Tyr- X_6 , or (d) Tyr-Phe-Ile-Asp-Phe-Val-Ala-Arg-Glu-Thr-Thr- X_7 -Ser-Lys-Glu-Ser

wherein:

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 X_1 , X_2 , X_3 , X_4 , X_5 , and X_6 are from zero to twelve amino acids, independently the same or different, more preferably from zero to six amino acids, and;

X₇ is Ala or Cys.

The peptides may also comprise biologically active fragments of high molecular weight kininogen domain 3. Methods of inhibiting endothelial cell proliferation and angiogenesis are provided.